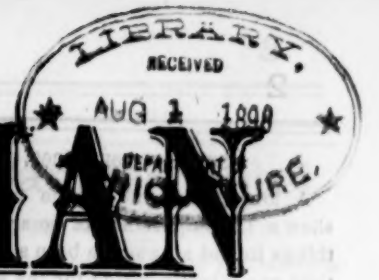


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All persons sending contributions to THE PLOUGHMAN for use in its columns must sign their name, not necessarily for publication, but as a guarantee of good faith, otherwise they will be consigned to the waste-basket. All matter intended for publication should be written on note size paper, with ink, and upon but one side.

Correspondence from particular farmers, giving the results of their experience, is solicited. Letters should be signed with the writer's real name, in full, which will be printed or not, at the writer's wish.

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AGRICULTURAL.

No land devoted to fruit should be cultivated after the first of August. Late growth is very likely to winter kill.

Pieces seeded to grass in July should be sown thinly to flat turnips. They will furnish a big lot of juicy food to the young stock next winter.

If the raspberry and blackberry canes need support at this time, run single wire three or four feet high along one side the row and tie a piece of twine around the clump and around the wire.

AFTER haying comes a spell when water is low in the bogs and swamps; a good time to dig out pond holes and make ditches. Lowland properly drained makes the most profitable mowings.

CURRANTS may be allowed to remain upon the bushes several weeks after they are ripe, but for shipping for any distance they should not be allowed to get over-ripe. Care should be taken to pick the fruit upon the stems, for if the berry is pulled off the stem the skin is broken and it will soon decay.

AFTER the squash vines have begun to run and occupy most of the space, it is better to let them alone. The less the soil or vines are disturbed the faster the growth, and the more fruit will be set. If maggots get into the roots and stems near the ground, pour a little strong soap suds into the ground where the injury is taking place.

With the potato crop this year the early digger will get the high prices. Those who have a crop ripening now on light land will probably get more peeling right from the field at once, to consumers than to allow the crop to fully ripen. The early sown crop will undergo no danger from rot. The sooner a perishable crop, like the potato, can be turned into cash the better. The Beauty of Hebron and other early sorts are bringing many dollars this year to the growers.

A NEWLY set orchard tree should have frequent attention the first year to see that it forms the right kind of a head. At the time of setting the branches need not be cut away entirely, and the other branches shortened back to balance the roots which were lost in transplanting. The tree should be trained with a straight central trunk from which the branches grow, not all from one spot but one above the other, and symmetrical in all directions. The tree must be watched all through the season and those branches pinched back which tend to outgrow the others. If any branches cross or rub against each other, one should be removed. If the tree is started right subsequent pruning will be much easier.

After blackberries have been gathered it is a good time to cut out the cane upon which the fruit has been borne this year and so give all the room to the selected new canes which are to bear next year's crops. The usual plan is to pinch the new canes when they are about two feet high to make them stocky. If there are too many canes some should be cut out.

Whether the war continues or not, farmers must be prepared to meet declining prices in many of the farm staples. Producers of wheat are confronted with the prospect of an immense crop in the United States, and with the probability that the demand from Europe will not be particularly great, since most of the wheat producing countries there have also good crops. No doubt the war will improve the demand somewhat, but this item will hardly offset the unusually large acreage to be harvested. Quite likely a considerable amount of the crop will go into storage with the hopes of a higher price later on.

Probably, as usual, other grains will follow a course somewhat parallel to wheat in regard to prices. This means cheap feed stuffs to eastern dairy farmers who will also, it appears, have abundant and cheap hay, thus giving them facilities to cope with the extremely low prices of milk and dairy products. That other staple of eastern farmers, the potato crop, will, it appears, be abundant, and after the early demand is satisfied, rather low priced. Apples promise to be a fair crop at a fair price. Live stock ought to hold up well, since farmers will have plenty of feed and will not be anxious to force a surplus on the market. On the whole, the prospect thus early is one of average prosperity with no cause for special rejoicing, and no need for complaint.

Strawberries in August.

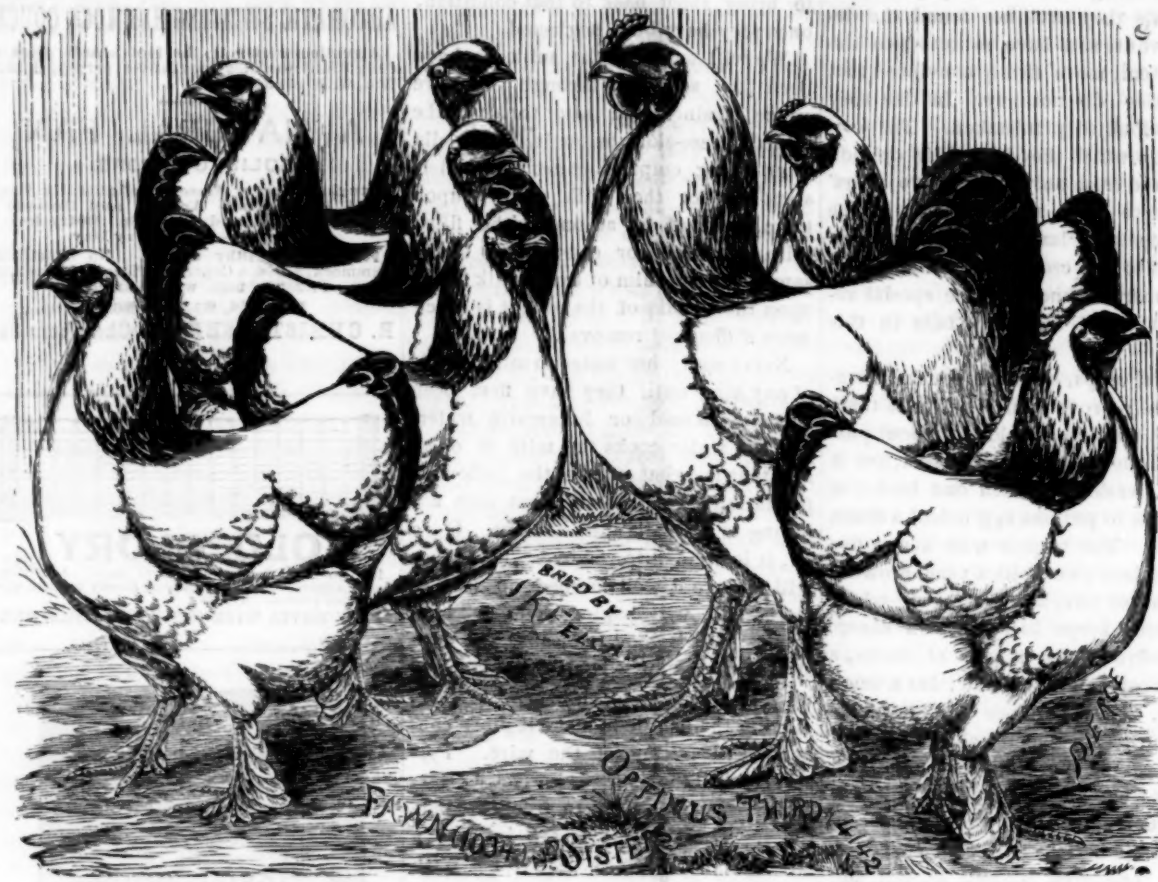
Plants set in August seldom pay in dollars and cents, but rather than to have no strawberries next year, the grower is advised to set, even now. If pot-grown runners can be obtained and set in moist land, the growth will be hardly checked and they will bear well next season. They will not have time to make so many runners as the spring set plants and they will therefore need to be set closer together in the row, and the rows nearer together. The land should be made very rich for August set plants.

If there is no other source for next year's crop it will pay to clear up the old strawberry bed after fruiting, especially if it is set on land where the weeds and grass do not work in very fast. A good way is to run over the bed with the mowing machine set high to cut off the tall weeds, then plough up the bed so as leave a row of the best plants eight inches to one foot wide. Take a sharp, narrow bog hoe and clean out the worst and most weedy places among the plants; finally apply a good dressing of manure or fertilizer. Bone or potash is excellent. A bed well repaired in this way will often yield almost as many quarts as it did the first year, and although small they will at least do for home use. Whether renovating pays or not depends somewhat on the soil. On moist loams strawberry beds get badly grassed in the first season, while on dry, clayish loams the grass will not work in rapidly and the bed will sometimes last two or three years in tolerable condition. Such beds should be enriched with manures which contain no weed seeds.

Getting all the Cream.

The above is an old and perhaps threadbare subject, yet it is one to which occasional reference needs to be made, because of the many absurd and conflicting theories constantly afloat. It is a common remark that nothing seems to be settled, and in dairying if anything ever is settled it does not long remain so. This is especially true when applied to cream raising.

The introduction of the Swedish system of cream raising in this country in 1876 was an important event in American butter making. Until then it was generally understood that the milk



LIGHT BRAHMAS.

should be set in shallow pans, stand forty-eight hours and never be allowed to get very cold. The Swedish system is just opposite in each feature. First, the milk is set in deep cans; second, it need not stand longer than from one milking to the next, at the longest, third, its temperature should be quickly reduced to forty-five degrees or below.

The introduction of the Swedish system started a good deal of thinking, talking, writing and some experimenting. It raised a good many doubts that were only settled by experimenting and demonstrating. But at last it came to be pretty generally understood that by the correct practice of the Swedish system of cream raising all the cream could not only be obtained between milkings but in a much shorter time. The facts are that if milk is set at or near the temperature at which drawn and quickly reduced to forty-five degrees or below, all the cream will be at the surface very soon after such reduction of temperature has been completely effected. This is a question that can be settled in any farm dairy—for that matter anywhere that milk, water and ice can be obtained.

F. W. MOSELEY.

Clinton, Ohio.

Crops in New England.

Reports from farmers in various sections of New England indicate a good all-around crop yield this year. The following quotations are taken at random from letters from all the six states: "Corn fully 100 per cent;" "rye 25 to 30 bushels per acre;" "beets and other roots in fine condition;" "potatoes will be a large crop, and good quality;" "corn and the grains all right;" "more hay than the grain what to do with;" "the yield of tobacco will be good;" "the onion crop is flourishing;" "apples promise to be rather light for a bearing year;" "pasture is very fair."

As will be seen, the reports of the staple crops are very favorable. In regard to fruits there is considerable variation. In most states the yield of apples will be only fair. The same is true of pears, plums and grapes. Cherries were plenty, raspberries and blackberries about the average.

What To Do With the Hay Crop.

Having harvested an enormous hay crop the question naturally occurs to the owner, "What am I to do with all this hay?" It certainly does appear to be somewhat of a problem, and it is a matter for each individual farmer to give his careful consideration. Circumstances vary, and what would be the best plan for one farmer to follow would be far from the best for another one to pursue.

Indications point to very low market prices, even lower than were received last season, but we have no positive in-

formation. Conditions may conspire to render hay worth more per ton six months from now than it is today. It would seem, however, to be the part of wisdom for the farmer to make his plans and calculations to feed as much hay out to stock upon the farm as he possibly can profitably. This means among other things the saving of fertility by the making of manure with which to build up the farm's fertility, which is really a very necessary and important feature of the question.

There are many enterprises upon which the farmer may embark for the purpose of feeding more hay. There is dairying, raising young cattle, boarding horses, keeping more sheep. Then to a limited extent, if it is deemed expedient, we may substitute hay for a portion of the grain rations of all classes of herbivorous live stock.

M. SUMNER PERKINS.

The Flat-Headed Apple-Tree Borer.

The much less dangerous, though more abundant, insect than any of the other borers, is the flat-headed apple-tree borer, says a bulletin of the Department of Agriculture.

The adult insect measures from a little less to a little more than a half inch in length. It is flattened above, resembles somewhat a snapping beetle, but it is not provided with jumping organs like the Ectophasia. The antennae are short and serrate, the eyes large and conspicuous, and the forelegs are armed in front with a conspicuous tooth. The upper surface of the body is dark metallic brown and fresh specimens are coated here and there with a powdery gray substance, which is easily rubbed off.

The wing-covers are ornamented and underneath, as may be seen when the insect is in flight, the body is a bright metallic greenish blue. The under surface is coppery bronze. The males are smaller and may further be distinguished from the females by their green heads as well as by other characters.

Unlike the round-headed borer the present species is diurnal in habit, being most active in the heat of the day and commonly found on prostrate trees and logs or on injured trunks basking in the sunlight. The beetles are active creatures, running rapidly and flying readily. This species attacks by preference diseased or dying trees, inhabits all parts of a tree from the base of the trunk to the limbs, and is not restricted in its ravages to fruit trees, but attracts also a variety of deciduous trees.

In all these respects it differs from the round-headed borer, but agrees with the latter in that it is injurious chiefly to young trees, its injuries being practically confined to newly transplanted nursery stock and to trees which have been weakened through any cause, such as careless pruning, or insufficient nourishment due to poor soil or drought. There

is a difference of opinion as to the nature of damage, some writers taking the stand that healthy trees are not injured at all. It is a well-known fact that many forms of boring insects prefer injured plants but when this is wanting do not hesitate to attack perfectly sound growth, and records show conclusively that the present species is included in this category. The general opinion is that trees suffering from "sun scald" are most subject to attack, and the opinion has been expressed that injury known under this name is in reality due to the work of this species of borer. The beetle is essentially a sun-loving species and deposits its eggs practically exclusively on the southern or southwestern sides of standing trees or on recently felled logs that are exposed to direct sunlight. Observation shows that it is doubtful if the young larvae would be able to withstand the strong flowing sap of vigorous trees.

Infestation may be detected by the discoloration of the bark.

A list of its recorded food plants includes, among orchard trees, apple, pear, peach; and of the shade and forest trees, mountain ash, oak, maple, box-elder, hickory, chestnut, sycamore, horse-chestnut, linden and willow. To this list should be added plum and cultivated redbud (*Cercis japonica*), and currant.

Cherry, beech, and white birch are probably food plants and elm, tulip, and cottonwood have been mentioned as such, but on what authority is not clear. Oak is without doubt the favorite natural host tree.

The larva differs greatly from that of the round-headed borer. Its name of flat-headed borer is derived from the peculiar flat expansion of the second thoracic segment, the one just behind the head. In color it is light yellow and in length it measures nearly twice that of the mature insect. It habitually rests in a curved position. The pupa shows the form of the future beetle and is of the same yellow color as the larva.

This species inhabits practically the entire United States and the southern portion of Canada, being a native of North America and injurious year after year.

NATURAL HISTORY AND HABITS.

The beetles make their appearance about the same time as the round-headed borer, in regions infested by both species, in the principal apple-growing regions of the northern states after the middle of May, and continue through the month of July, and, it is said, even into September, the female depositing her eggs upon the trunks of trees destined to be the future food of the larva, in cracks and grooves or under bark scales. Several eggs are most frequently found together. The eggs are yellow in color, irregularly ribbed, and about one-fiftieth of an inch in length. The larva differs from the round-headed borer in that it requires only a single year for its development, pupation occurring in the

spring shortly after the appearance of the beetles. It differs also in its manner of work, living for the most part just beneath the bark, where it excavates broad, flat, and very irregular channels, but sometimes entering more deeply into sap-wood. Like many other borers it often girdles a small tree, a single individual being capable of killing a small tree in this manner. As it approaches maturity it generally eats deeper into the solid heart-wood, but in spring time, just before transformation, it works back into the bark, and there constructs its pupal chamber. In the pupa state it is said to remain for about three weeks, when the beetles cut their way out, leaving an elliptical exit hole in the bark, which distinguishes its work from that of the round-headed borers, which make round holes in their exit, these holes corresponding to a cross-section of the beetle which make them. In the north the winter months are passed as larvae, but farther south, in the District of Columbia, according to recent observations, pupation may take place as early as November the first year.

Among natural enemies, woodpeckers are effective destroyers of this species, as are also ants, which devour larvae and pupae under the bark. A number of parasitic insects also prey upon it and assist greatly in restricting its too great abundance.

REMEDIES.

The remedies advised for the round-headed borer (given in our last issue) are also of value and are generally employed against the present species. It is necessary, however, that deterrent coverings and washes should be applied rather up the trunk and to as many branches as can be conveniently reached. As this, however, necessitates additional labor and extra expense, other preventive measures are recommended.

Trap-wood for the beetles.—For this purpose any sort of tree known to be freely attacked by this borer, e. g., oak, maple, or any fruit tree, may be used. If a few limbs or trunks of newly felled trees be placed at intervals, say, of thirty or forty feet, on the outskirts of orchards, where they would be freely exposed to the sun, the beetles would be attracted for the deposition of their eggs, and all that would then be necessary would be to destroy the trap wood by burning before April and May of the following year. This plan has not been practically tested, but the writer has no doubt that it would prove useful in securing immunity from this pest in the orchard, provided that no diseased fruit trees be left for food.

Cultural carefulness.—Careful, clean methods of cultivation are essential as a measure of protection, and involve the cutting out of dead, dying and injured deciduous forest and shade trees known to be chosen as food by this beetle, as well as orchard trees. Care should be exercised in transplanting, and especially in pruning, and the use of fertilizers should not be neglected that the trees may be thrifty and better able to withstand attack. Proper regard for these measures should give practical exemption from injury.

Home Mixing of Fertilizers.

Most users of commercial fertilizers buy mixed goods, says a bulletin of the Vermont station. This method of purchase is frequently the best, provided wise choice is made. The well informed farmer, however, can often get better grades at lower figures by buying the raw materials and mixing them to suit his special needs. The man who knows what he wants and pays cash for crude stock gets plant food for much less than does the credit buyer of mixed goods. Many manufacturers are glad to cater to this class of trade and to make quotations to it. They find it quite as profitable as to sell at higher prices on credit doing what is essentially a banking business for their customers. The individual farmer himself must decide which method of purchase best meets his conditions; whether as a matter of convenience, and to avoid the necessity of study, a little bother and cash payment, he will pay a dollar for sixty cents worth of plant food, or by the exercise of a little business energy and foresight,

get from eighty to ninety cents worth for the same outlay.

Several of the farmers who practise home mixing were asked a series of questions by the Vermont stations as to the practicability of this method. Their replies are summarized thus:

1. They had practised home mixing for two years or less.
2. They had made from one to six tons yearly.
3. They had found no difficulty in getting low quotations.
4. They had found no difficulty in mixing.
5. The mechanical condition (fineness) of the goods was satisfactory in five cases; two reported lumpiness of the nitrate of soda an obstacle; one of the latter overcame this by having the nitrate milled before using.
6. Three estimate cost of mixing at fifty cents a ton, three at a dollar, while one states that the work was done at odd sells and makes no money estimates.
7. Five state that the goods have good field results, one that they were the best ever obtained, and one mixed for the first time in 1898.
8. The goods were used on corn, potatoes, onions, etc.
9. Six state that home mixing paid; one mixed for the first time in 1898, and states that if field results are satisfactory it will prove a paying operation.
10. The following advantages and disadvantages are pointed out by seven farmers.

- a. **Advantages:** Better goods for less money, giving as good or better results than the commercial brands.
- Mixtures to meet special needs of soil or crop.
- Educational value.
- b. **Disadvantages:** None.

The objections to this method of buying plant food most commonly urged are:

1. That not enough is saved to make it pay.
2. That farmers cannot make perfect mixtures.
3. That farmers cannot formulate mixtures that will do good service.
4. That it is a fussy and costly task to mix the goods.

Most of these objections have been shown in the past to be fallacious, and again are proved to be without basis in fact by the cases here cited. The parties whose goods have been analyzed at this station did make it pay, did mix it with a sufficient degree of evenness, many of them made mixtures better adapted for their uses than the majority of mixed commercial brands sold in the state, and they do not seem to lay stress on the difficulty of mixing. It would appear as if the final objection alone is worthy of consideration. Those to whom it appeals, who prefer to buy mixed goods rather than raw materials, might well combine and buy fertilizers of specified composition made from standard crude stock on competitive bidding by manufacturers. This method of purchase is largely in vogue in some localities and is decidedly preferable to that commonly practiced.

It may not be amiss to describe briefly the process of home mixing. A tight barn floor, platform scales, screen, shovel and hoe comprise the outfit. The materials being weighed, screened and lump pulverized, the most bulky goods (usually the acid phosphate) are spread in an oblong pile from six to twelve inches deep. Upon its leveled top are placed one above another the other ingredients, the resulting pile resembling a layer cake. The pile is then mixed by careful shovelling, the shovel cutting down through all layers each time. The pile is then leveled again and the operation three repeated. The mixture may then be screened again if desired.

Vermont farmers seldom think of cottonseed meal as a fertilizer, yet hundreds of thousands of tons are thus used yearly in the south and large quantities even in New England. It is undoubtedly better to feed it to stock in moderate quantities, enriching both ration and manure, thus getting two returns for one expenditure. But where more nitrogen is needed than the manure pile supplies, it is safe to say that at the prices ruling during the past few years, no cheaper source of readily available organic nitrogen has been offered in small quantities in our markets than in cottonseed meal. The schedule of trade values used by this as well as other New England stations allows fourteen cents a pound for organic nitrogen at the seaboard. It has cost this year on the average in cottonseed meal delivered in Vermont but 12.9 cents a pound.

Farms for Rent

FRUIT and Poultry BARGAIN.—22 acres of land, with poultry house 17x30, L 10x15 nearly new, painted and clapboarded. No house or barn but same can be rented. Near by as properity situated in small village; 3 miles to Stores P. O., Church and Schools; 3 miles to R. R. Station. Land all set out to Fruit and Nuts, 800 apple, as follows: 150 Baldwin, 150 Kings, 200 Ben Davis, 100 Greenings, 150 Gravensteds, 100 Spies, 50 Russets, 50 of other varieties, 250 Pears, all leading varieties; 150 peach, 240 plum, 20 cherry, 20 grape, quince and gooseberries. 1000 Paragon chestnuts, 1500

SOUTH EASTON N. H. FARM—125 acres
with 65 mowing and tillage, 60 pasture,
home use, land level, free from stones, clay sub-
soil, 20 acres underdrained, cuts 10 tons English
hay, fish can, 100 bushels corn, 100 bushels
clover, 100 bushels alfalfa, 100 bushels
horses, best of never failing water house.
barn, 100 Baldwin's and russets in bearing; 40
cows, 10 calves, young apple trees 8 years old
all varieties, plum, grape, cherry, etc.

[illegible]

A MONEYMAKER. 220 acre farm, 2 miles from Attleboro, one of the best markets in the state, and 300 from Boston. Farm is well stocked with large amount of wood and timber, including 6000 cord of round cut lumber. The estimated sale of wood at \$4.50 per cord is assured. The lake land value, free from stone, all worked by machinery. There are 800 head of cattle, 1000 quarts daily; yearly sales of milk amount to over \$5000. There are also 1000 sheep. In the last 3 years, losses from sales for last three years, did not exceed \$15. Books open for inspection. Also 3000 bushels of corn, 1000 bushels of soybeans, 3 horses, all tools, vehicles and farm machinery available on place. New house, filled, for nice view. Call or write for more information without question one of the best farm properties.

20 MILES OUT—75 acres land, level, free from rocks; 1 mile to Stores, P. O. station, and water supply; over 180 apple, pear, good water supply. Price \$10,000.

grapes. Borders Lake; fine chance for boating and fishing. Large house 16 rooms, painted and tiled. 1000 sq. ft. of garage. 1000 sq. ft. of barn, carriage, henney and corn house; all buildings first class. \$9000. Free and clear.

28 ACRES FOR \$2000.— Cottage house, 7 rooms, 1 mile to station, 1/2 mile to office. Station, etc. Water supply from fine spring; cuts 10 tons hay, can be made to cut 20 tons. 1000 sq. ft. of garage, 1000 sq. ft. of barn, carriage and on a main road. Barn 18x24 with sections 108 square ft. tilth, henney for 200 fowls, note the price \$2000.

GOOD FARM—GOOD COUNTRY RESIDENCE—**GUIDENCE—GOOD FOR SUMMER BOARDERS**—**28 ACRES FOR \$2000.**— Cottage house, 7 rooms, excellent buildings and is but 1 mile to 2 villages. Stores, P. O. Church and Station. This section of Massachusetts, more and more each year. Farm 28 acres, 1000 sq. ft. of garage, 1000 sq. ft. of barn, wood and timber; 2-story house and L. 9 rooms. In good repair outside and in. Barn 23x24 with sections 108 square ft. tilth, henney for 200 fowls, note the price \$2000.

[illegible]

12x12, running.
Apple, 30 Pear, 100 Peach Trees, 1 acre Straw
berries, 1 1/2 acre of Blackberries, closed dis-
barn, 100 crates Strawberries, 125 story house,
rooms; good, wide; barn 30x45, all connects
house and barn; new shop 20x24; 2 new boats; 1
all buildings in good condition. Price \$3500.
\$1000. down. Apply to W. D. HINDS, Town-
send, Mass., who will show it by appointment, or
J. A. WILLEY, 178 Devonshire St., Boston.

J. A. WILLEY,
178 Devonshire Street, Boston.

*See our Special Offer on
the Etahth page.*

the English...

Farms for Sale.

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consists of 23 head, 5 bulls, 41 sheep and 20 calves. Neighboring farms will sell farm and personal effects for \$1000.00. The stock will rent for one or three years with a privilege of buying for \$1200.00 per year. J. A. WILLEY
178 Devoushire St., Boston.

A MONEYMAKER. 220 acre farm, 2 miles from Attleboro, one of the best markets in the state, and 300 from Boston. Farm is well stocked with a large amount of wood and timber, including 1000 cord of white oak, 1000 cord of red oak, and 1000 cord of white pine. The sale of wood at \$4.50 per cord is assured. The lake land, free from stone, all worked to the water's edge, will produce 1000 bushels of quarts daily; yearly sales of milk amount to over \$5000.00. The farm has been in operation 30 years, losses from sales for last three years, not exceed \$15. Books open for inspection. For particulars, call on or write to J. A. WILLEY, 3 horses, all tools, vehicles and farm machinery for sale on place, new house, filled, the nice view, 1000 bushels of quarts daily, without question one of the best farm properties

20 MILES OUT—75 acres land, level, free from rocks; 1 mile to Stores, P. O. station, and water supply; over 180 apple, pear, good water supply. Price for all \$1500.

GRAPES. Borders Lake; fine chance for boating and fishing. Large house 16 rooms, painted and tiled throughout. 7 bedrooms, 2 full baths, first class, henney and corn house, all buildings first quality. \$9000. Free and clear.

28 ACRES FOR \$2000.— Cottage house, 7 rooms, 1 mile to station, hot office Station, etc. Water supply from fine spring; cuts 10 tons hay, can be made to cut 20 tons. 10 miles from Boston and 10 miles from Boston and on a main road. Barn 18x24 with sections 103 acres worth. Tilapia, henney for 200 fowls, note the price \$2000.

GOOD FARM—GOOD COUNTRY RESIDENCE—**GUIDANCE—GOOD FOR SUMMER BOARDERS**—**CLIMATE—VERY PLEASANT**.—This section has excellent buildings and is but 1 mile to 2 villages. Stores, P. O. Church and Station. This section of Massachusetts, more and more each year. Farm 28 acres, 100 above pasture, 100 wood and timber; 2-story house and L. 9 rooms, and glassed porch, 100 ft. long. In good repair outside and in. Barn 23x24 with sections 103 acres worth. Tilapia, henney for 200 fowls, note the price \$2000.

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12x12; running water. Apples, 30 Pear, 100 Peach Trees, 1 acre Strawberries, 1 1/2 acre of Blackberries, three glass Bins, 100 crates Strawberries, 1 1/2 story house, 9 rooms; good shade; new barn 30x45, ell connected; house and barn; new shop 20x24; 2 new houses; all buildings in good condition. Price \$3500. \$1000. down. Apply to W. D. HINDS, Townsend, Mass., who will show it by appointment. J. A. WILEY, 178 Devonshire St., Boston.

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178 Devonshire Street, Boston.

*See our Special Offer on
the Eighth page.*

POULTRY.

Poultry Notes.

Skim milk is a good substitute for meat food.

Whitewash not only helps drive out the lice, but makes the inside of the henhouse lighter.

Oats are one of the best single grain foods for laying hens. Oats and corn mixed make a good evening food.

One pound of meat scraps to about twenty-five hens is the right proportion fed with soft food. Give three times a week.

Heat and sunlight will yellow the plumage of the light colored breeds, but they will become white again all right after the next moult.

Add a little linseed meal to the morning mash both for laying hens and growing chickens. It is a combination of food, medicine and tonic.

The most common mistake with farmers in feeding poultry is to feed too much corn. Feed more shorts, gluten meal, wheat, buckwheat and oats.

A New York poultryman recommends prickly pears as a green food for poultry. A very small patch will furnish a great deal of bulk, and the fowls relish it.

Keep the fowls active and always on the lookout for another kernel of grain. A good sized patch of turnips sowed now will make good bulky food for the hens next winter.

Dried brewer's grains contain considerable egg material, and if they can be obtained conveniently they should be fed occasionally, say once a week, along with ground grain.

Chicks should not be allowed to spend all their time scratching manure under the barn cellar. They like to be there but the darkness and foul gases sometimes makes them pale and sickly.

The crushed stone which is sold by the supply stores for grit is first rate and its use saves a good deal of trouble, but pounded crockery or glass, or fine, sharp, gravelly stone will answer the purpose if they are faithfully provided.

A good mixture to sprinkle around the henhouse, especially about the roosts and in the dust box, is one peck of slaked lime, two quarts of tobacco dust, one pound of carbolic acid of lime. Hens do not mind this mixture, but it is death to lice.

Chickens hatched September 1, will grow faster than any other. If the cockerels of the large breeds are castrated when between two or three pounds in weight they will make splendid capons to sell in June when the prices are higher.

There is no need of mixing oyster shells with the food. If she has access to them all the time a hen knows just how much lime she needs, and may be depended on to help herself. Oyster shells are not sufficient for grit. Something harder and sharper should be fed also.

Enlarge for poultry can be kept all right in a large tight barrel. The best crop to preserve in this way is clover. Fill the barrel, jam the contents down and fill again until it is packed as tight as possible. Then fit on a loose head a little smaller than the barrel. Pile on a heavy weight of iron or stones. Get as large a barrel as possible, a vinegar tun or molasses hoghead is better.

In regard to cats prevention is better than cure. Shut the chickens up in a tight coop of fine wire netting, and bid defiance to all pests. But if you think cats must be killed, don't shoot or poison them, and thus gain the ill will of the whole neighborhood, but fix a common box trap of large size, with a dead chicken, or other attractive food for bait. When a thief is caught dispose of her as quietly as possible.

July is not regarded as a good month in which to hatch chickens. The excessive heat is injurious and insects are not so plenty as early in the season. Insects on the chicks themselves are liable to be especially numerous and care must be taken to dust the chicks with insect powder and to use other remedies for lice. Unless the chicks are of the small breeds there is little hope of getting them to lay before cold weather.

Did you ever try to hypnotize a chicken? It is a very easy thing to do, says the Rural World. Just catch your hen, place it on the floor in front of you, with its tail toward you. Take a piece of chalk and draw a straight line, beginning at a point just under the hen's head and extend a foot and a half or more. The bird will fasten its eyes on the chalk, and in a twinkling almost she is unconscious of anything but the line.

Kill Competition.



The way to kill competition is to make a better article than the other fellow. Common butter has lots of competition. First class butter has little competition. The dairyman who uses a SAFETY HAND SEPARATOR takes out all the butter fat and makes butter that is beyond competition.

P. M. SHARPLES, Elm, Ill. Omaha, Neb. Dubuque, Iowa.

You can cuff and kick her about as much as you please, but her gaze will immediately return to the chalk line.

Splendid results have been obtained with a cross of Houdan cock with Brahma hen, the result being crossed the next year with Plymouth Rocks. Chicks from this cross, it is claimed, have reached a weight of four and one-half pounds in three months, giving a well-shaped and fine-flavored carcass. Some of the Langshan crosses have also given excellent results. Langshan upon Plymouth Rock is good.

To finish off the chicks for market shut them up in a place as cool and quiet as possible, feed them four times a day with a variety of food. About half the grain should be whole and half of it ground, feeding rather more of corn and corn meal than of other grains. Such additions to the mash as tallow, any kind of grease, or any sweet stuff such as cheap molasses will help put on fat. Feed a little linseed meal and also an occasional ration of meat or scraps. It is very essential to provide grit enough for fattening chickens.

Here is Jacob's ration for a flock of twenty-five Leghorn hens when they have full range of the farm. Give them once a day, at night the following mixture: "Ground oats four parts, linseed meal one part, ground meat one part, and bran two parts; mix with milk or water, and give of a somewhat dry, crumbly condition, allowing one and a half pounds of the mixture, after it is moistened, to the twenty-five fowls. During dry weather add a teaspoonful of sulphur, also add enough salt to season the food.

ED. MASSACHUSETTS PLOUGHMAN: Dear Sir.—Please state a remedy for gape disease in chickens. C. C. Newport, Vt.

[A good plan is to moisten a feather with turpentine or kerosene, insert into the windpipe and turn until the worms are removed. An additional remedy which can be tried at the same time is to throw fine air slaked lime about the coop until the air is full; the dust will cause the chickens to cough out a good many of the worms. The hens and yards should be kept clean and dry.—Poultry Editor.]

Seasonable Reminders.

So-called chicken cholera, investigation will often prove, is but an extensive development of vermin. The healthy hen is free from vermin. Almost invariably other ailments, except of course colds and cases of roup, are mainly due to vermin. The hens that are infested with vermin are so debilitated that they readily succumb to disease, and are also more apt to get colds and rump than hens not infested. It is during warm weather that eternal vigilance becomes necessary to keep down insect pests that abound where neglect allows them to once get a foothold. Every known device must be utilized during summer to keep the vermin pests of the poultry yard in check. The first and most important consideration will always be cleanliness of the most thorough nature. Wild fowls rarely ever become infested with vermin to any great degree, because they are not confined to restricted quarters in large colonies, like domestic fowls. Under conditions such as it is necessary to resort to in keeping domestic fowls, the vermin pest takes advantage of every neglect. When the summer season arrives, which is so propitious for the increase of vermin in the poultry yards and houses, extra exertions and all known methods must become the order of the day. Finely pulverized soil kept under cover will afford the fowls a chance to indulge in dust baths—nature's plan for ridding birds of vermin. If some tobacco dust, insect powder, and once in a while powdered sulphur is added to the dust bath, either will hasten the extermination of the pests.

All the material used in the nests of the layers should be taken out and burned every three weeks. The nest boxes should then be thoroughly swabbed out with coal oil. Use a wide brush, such as painters use for varnishing, and see that the coal oil gets in all the crevices of the nest. This treatment will kill the nocturnal mites and nits that find snug hiding places about the nest boxes. The same treatment, and as often, should be given to the roosts. These accessories should be

taken out on a sunny day and coal oiled and left in the sun to dry. While they are out it will be a good plan to whitewash the interior of the henhouse.

As soon as a hen hatches out a brood brood the nesting material, and coal oil the nest box. When the chicks are three days old every chick's head should be greased. This should be done late in the evening—just at dark. Some brands of lard will make the chick's head sore, as there appears to be some strong chemical substance in the lard. It is safest and best to use sweet oil. Put enough oil on the end of the finger to completely anoint the top of the head of each chick. If you have lard that you know is pure it can be used. Grease the mother hen under the wings and over the vent. The warmth of the hen's body diffuses the grease, which is the main reason of the necessity for doing the work in the evening. If done in the morning dirt adheres to the lard, and it does not get an opportunity to become so effective. Coal oil the inside of the brooder coops once a week, and turn them up so the sun can shine in them for half a day. Move the coops to new ground at least twice a week.

Let the hens and chicks have a chance to choose between sunshine and shade. Bare yards, those where no vegetation exists, and where many fowls are kept, should be spaded up every ten days, and during the intervening time occasionally give the yard a dressing of air slaked lime. Do it in the evening after the fowls have gone to roost.

Fowls closely confined in bare yards, unless they are furnished plenty of green food in summer, usually soon present an unsightly appearance. They are apt to commence feather plucking. Yarded fowls should be liberally supplied every day with green food of some kind. On the farm there is not much excuse for keeping fowls confined in small yards. Where it is done the farm affords every opportunity for securing an abundance of green food, also varied in kind. The weeds from the garden, and later on, the radish tops, early cabbage and beet leaves, should always be given to hens. The sweepings of the haymow, especially if the hay contains clover, will be an excellent substitute for greens. This waste contains too much dust and dirt to be utilized for feeding to other live stock, but contains nutrient that is especially valuable to hens that are confined in close yards.

Keep the drinking water supply in a shaded place. Renew two or three times a day. Always throw out what is left in the vessels when making the round for replenishing, and fill up with fresh water. Empty everything at night. Scald every drinking vessel once a week.

Those who neglect hot weather duties in the poultry yard next fall will be claiming they "did not have very good luck this season." A lady from Philadelphia was recently visiting friends in Baltimore county who have a flock of good Houdan fowls. A hen was killed for the table the day before the lady returned, and she begged for the head and wings. These she took to Philadelphia and had a taxidermist prepare them for her hat at a cost of two dollars. Her milliner told her the Houdan head and wings were unusually fine, as the crest and beard were of unusually good size and the feathers were very evenly mottled, and that they were worth five dollars. Hats of this kind are quite fashionable in the Quaker city. The above may afford breeders of handsome pure bred fowls an idea as to utilizing what have been waste portions of fowls. All crested breeds should be in demand now.—G. O. Brown, in Baltimore Sun.

Prepare for Moulting Season.

The greatest care must be taken to keep fowls in good condition during the moulting season. It is a drain on their vital powers to furnish the material for a full coat of new feathers. There is apt to be a laxity of attention to their feeding during this period on account of their cessation of laying, when, in fact, there should be more care taken. It is a good plan to select all the fowls that it is desired to winter or keep for breeding and market the balance. This will cut down the expense of the moulting season. Hens which will moult early, if they are in good condition and comfortably housed, will nearly always make the best winter layers, while the later moulting will rarely lay until spring. These latter should have a place where they can keep warm and dry and given an abundance of nutritious food. The period of moulting may be shortened by careful attention and supply of food rich in muscle, bone and feather-forming materials rather than fat-making foods. Always pro-

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viding pure, fresh water and keep the quarters clean. Wheat, oats, linseed meal, bone meal, meat scraps and fresh ground bones make better food at this time than corn or anything that may be considered a fattening ration. While it may not be best to feed the chickens all they will eat, in nearly all cases liberal feeding and the supplying of a good variety will be found the most desirable thing to do. The hens need to take sufficient exercise to be healthy.—Feather.

Outworms in the Cornfield.

Every farmer and gardener has seen and suffered loss by some of the many varieties of out worms. We do not know how many of the twelve varieties known attack our corn, but they all have the same general habit or life history. And as we cannot intelligently fight an enemy until we know something of his resources and mode of attack we may briefly say that all out worms are the larvae of moths that lay their eggs during the summer and early fall on or at the roots of plants. These eggs hatch in a few weeks and the young larvae feed on various growing plants. Before winter they burrow in the ground and are dormant until plants begin to grow in the spring, when they come to the surface and attack the first green, tender plant. They do not consume the whole plant, but cut it off or cut into it as it were in wantonness. Their work is done in the night. They do not like the hot sun or strong light. That they are poor travelers is fortunate, since it gives the corn grower a chance to prevent their passing freely from hill to hill of his corn. It is also fortunate that they are not more likely to come out of the ground near the hill of corn than remote from it. But wherever they come to the surface they start for the nearest green succulent plant, be it a spear of grass or clover, a tobacco or cabbage plant.

Corn planted on sod ground seems to furnish the conditions that favor the moths laying their eggs in the clover or grass that is to be plowed for corn. The larvae come up in the well prepared cornfield and find that the ground is bare of every green thing except the young corn. If there are many worms the damage to the corn must be great. Some farmers claim that in turning clover soil in the spring for corn it is better to plow some clover is left to grow, as these stray clover plants furnish feed for the outworms and thereby save corn. This is the best argument in favor of slovenly plowing we know of. Another fact about these outworms is that they travel readily over a smooth surface and poorly over a rough one and cannot climb a perpendicular bank. In this latter respect they are like the army worm. To check the advance of this pest farmers turn a furrow toward the approaching mass of worms. Their advance is checked until they fill the furrow and can pass over one another when the furrow is full of their fellows. This inability to travel over rough ground and climb the perpendicular cut made by the bar-share plow gives a hint on first cultivation of corn. It certainly favors their movement to have the ground made level and smooth with the roller or smoothing harrow. It is equally certain that if instead of using such implements for first cultivation we use a cultivator, or better yet a small bar-share plow, or a cultivator with a bar-share attachment that leaves the middle loose and rough and the corn standing on a narrow ridge with the sides clean-cut by a rolling cutter we have the corn where the majority of the outworms cannot get at it. As outworms are liable to come to the surface as soon as the planted crop shows above ground it follows that if we would protect the crop from outworms we must begin work early and not wait for corn to get "big enough to work," as some say and do.

Our experience with corn after clover for twenty-six years favors starting the cultivators or double-bar share plows as soon as corn is large enough to see the corn readily. We believe that if this is done the injury by outworms is so light that there will be little to replant. There are many other suggestions made by entomologists as means of protection. All agree that hunting and killing them is effective if you can get force enough and can get enough money to pay for it. Leutner recommends sprinkling a spoonful of salt on the hill of corn. The salt makes the corn unpalatable to the worms. He also suggests soaking the seed in copperas water. Prof. Smith of New Jersey advocates sowing kinsit broadcast just before planting the corn. Riley suggests scattering clover or grass over the ground after having sprinkled the clover or grass with Paris green. Riley also suggests a device for making holes around the hill of corn, into which the clumsy worms are to fall. As they cannot climb a bank the corn is safe if the worm falls into the holes. Others have suggested scattering soot, ashes, lime, etc., around the corn. These may all be beneficial as fertilizers, but the outworm is immune against all such stuff.

He cannot climb a bank; of that we have ready proof.

If we could protect our corn against wireworms, ants and aphides, corn-root worms, and white grubs as easily and effectively as we can against the outworm corn-growing would be less risky and the cost of the crop greatly reduced.—Breeder's Gazette.

Mulching Gooseberries.

The reason so many fail to have satisfactory gooseberries is that they fail to remember that this bush is a lover of coolness and moisture, particularly the European varieties of it. And even our native sort is found in shady woods and hedgerows in the Northern and Western States, where the surrounding bushes afford it some shade. The European gooseberry is of a distinct species, and flourishes only in climates much cooler in summer than ours is. It is not moist air alone that it needs in order to flourish, but moisture and coolness combined. Three years ago when visiting England, the season—June and July—was an exceedingly dry one, no rain falling for, I think, nearly two months. The gooseberries did not mind it, but kept up their foliage in good health and ripened a full crop of fruit.

I do not think mildew of the leaf is known there, and this, as is well understood, is what is the trouble here. Both leaves and fruit mildew. Spraying is now so much practiced that fungus diseases are not feared as they were; and with its aid more may be done with this European fruit than has been possible before. My own spraying experiments lead me to believe that a bush or tree kept healthy several years in succession by spraying becomes in the end more robust and better able to resist diseases. I have had fruit trees so treated which were brought to a much higher standard of health than before by it. It would not be too much to expect the same result from the spraying of the gooseberry. It is not only coolness overhead that this bush needs, it is just as important or more that it be secured, too, for the root. This can be obtained in several ways. It is practicable for the amateur to pile loose stones about his bushes, which is one of the best of ways. The commercial grower will find mulching with grass clippings a good plan. And it must not be thought that the foreign sorts only want this cooling material. Our native ones will be very much the better for being treated in the same way.—Jos. Mehan in Practical Farmer.

A tin or galvanized pail is better to feed calves in than wood. It is lighter and easier to handle, may be kept clean with much less work, and when one wishes to warm the milk it may be poured into the pail and set on the back part of the stove until warm enough.—Agricultural Epitomist.

A cow giving a large quantity of milk has been slaughtered, and every drop of milk has been gathered up, and the largest amount ever found was about four quarts; hence milk is largely made during the time of milking; and the cow must be placed under favorable conditions at the time or you do not get the regular quantity of milk. Do not think that the milk is already there, and all you have to do is draw it out. Only a small portion is in the state. Most of it is there ready to be changed into milk, but it is not milk and we must have things favorable for the cow to make this change.—Farmer and Stock Breeder.

Strike Quick. "On the instant when a lion shows his temper," said a famous lion tamer "cut him quickly over the face. Don't wait until he springs at you." This is equally good advice for treatment.

ing the lion of disease. Many an attack of dangerous illness would be headed off if at the first premonitory symptoms the victim would strike quickly.

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MASSACHUSETTS PLOUGHMAN

BOSTON, JULY 30, 1898.

Persons desiring a change in the address of their paper must state where the paper has been sent as well as the new direction.

A country boy has to live about ten years in the city before he can appreciate what a good home he had on the farm.

English farm laborers get nearly as much per month as those in America, but instead of board they get a little house and garden rent free.

There is a future on the rough hills of New England for the chestnut, butternut, walnut and ash, and other hardy and valuable nut and timber trees.

"Whether my crops pay or not," said a young farmer, "it's fun enough for me to make them grow as they should." This is the spirit of a born farmer. He is sure of his fun anyway. But his crops do pay as a general rule because he has the enthusiasm to work early and late, and to use his brains as well as his hands.

Now is the time when the row announcements plainly what was put in it in the spring. A well manured row of corn or potatoes will stand the August drought and hold up green while the starved row has a sickly and discouraged appearance. Well filled furrows in spring are followed by well filled barns and cellars at harvest time.

Success seems to come suddenly sometimes, but nothing really worth while was ever done at a jump. By looking closely it will be seen that the road was paved with numberless little details, which made the journey quick and easy. The greater part of the work of genius are the crowning results of hard work concentrated in one direction.

It is almost a mathematical certainty that farm land will be worth more in time. The amount of land to be cultivated can only increase to a certain limit, but there is no end to the increase of the number of mouths to be fed. Bad times, or depressed prices for staple products may at times cheapen farm values, but the time must come, when, as compared to other property, farms will be more valuable than now. In the best farming districts of the West a steady advance is noted even now.

The hay crop will be large this year and prices probably low. It will be best to turn the hay into something that can be sold at a fair price and without robbing the farm of fertility. A ton of low priced hay robs the farm of almost as much fertility as the hay is worth. But a ton of better hay removes only about fifty cents worth of fertilizing elements, yet sells for many tons of hay. Selling milk robs the farm faster than selling butter, but it is much better for the land than selling hay. With the hay farmer the only escape from a run out farm in course of time is to buy fertilizer or manure. Better sell the hay to the cows and take your pay in milk and butter, and put the fertility back where it came from.

No work is so hard to do as that which has doubled in amount because not done in the right time. It is a hard task swinging the hoe when a timely use of the smoothing harrow and cultivator would have made hard-work unnecessary. It is hard to pull weeds which might have been smothered with the hoe a few weeks before, and it is hard to fight the thousands of descendants of those few weeds which were allowed to go to seed last year. It is difficult to fight millions of bugs because a little spraying was not done earlier in the season. It is not easy to harvest fallen corn fodder or woody and tangled mowings because the harvest was put off too long. What a difference it makes whether a farmer foresees every task and pushes it, or waits for the work to push him.

There is a great future for the co-operated use of tools and expensive machinery, but it is to be feared that such a future is a good way off, so long as the principles and practice of borrowing and lending such instruments continue as they are. There are too many "Farmer Slacks" who would leave a borrowed tool out in the weather until the owner sends for it; too many who would decline to repair a borrowed tool which they have broken; too many who expect the borrowing to be all on one side and have nothing to lend; too many who are too shiftless to own anything themselves but expect to do all their work with the tools of others; and too many who are too careless and ignorant to handle good machinery anyway. A little group of intelligent farmers who will handle their machinery according to the golden rule will do an incredible amount of work by co-operating. Under the right circumstances it is the one way by which a small farmer can afford to use all the modern and expensive improvements.

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CURRENT TOPICS.

These are days of preparation and waiting rather than of actual achievement. The only acquisition made during the past few days has been the capture of Niye by Admiral Sampson, a port on the northeastern coast of Cuba. As originally determined, Niye was to be the point of rendezvous for the several military detachments which would have made up the army of invasion intended for operations against the Spanish force in Porto Rico. In the future it will be used as a base of supplies for the army and navy, a harbor of refuge for war and transport ships, and a base of operations against the Spanish force remaining in the province of Santiago de Cuba.

Niye is directly to the north of Santiago, the bay of the same name being a magnificent anchorage for ships, sheltered on all sides by peninsulas, which almost meet, the channel leading into the bay being very narrow. There is plenty of water in the bay to accommodate vessels of the blockading squadron, transports, colliers and supply ships. The bay of Niye is thirty-two miles distant from Holguin, where a considerable body of Spanish soldiers are stationed. It was to this point that General Tola desired to retire in reply to General Shafter's demands that the city of Santiago capitulate. It was from this point also that General Tola expected reinforcements. It is not expected that any immediate efforts will be made to destroy the Spanish forces at Holguin, as the Government will bend all its present efforts to the subjugation of the Spanish force in Porto Rico.

The expedition to Porto Rico is being very carefully planned and executed and no mistake is to be made through undue haste and lack of preparation. Although details are not authoritatively given out, yet it is well known that a large force has been prepared for invading the island and is already on the way there or has already landed. This will be well protected by a sufficient naval squadron to silence the forts and batteries at the entrance to the harbor of San Juan. The reasons for this move upon Porto Rico are chiefly two. One is that its subjugation will be a telling blow to Spanish prestige. Although a small island, it is a rich and highly prized one and its loss to Spain will be seriously felt, which cannot fail to hasten the coming of peace. Another reason is that it will greatly simplify the peace negotiations when the much desired time arrives for such action. So long as Spain has a foothold in the New World, so long will there be trouble.

By its geographical position Porto Rico is peculiarly adapted to become the center of an extensive and flourishing commerce, says the Review of Reviews. The fourth in size among the Antilles, it lies to the windward of Cuba, Santo Domingo, and Jamaica, and of those important commercial outlets the Gulf of Mexico and the Bay of Honduras. It is within easy reach of all the other islands of the West Indies, only a few hours' sail from the Danish colonies St. Thomas and St. Croix, and a few days' sail from the coasts of Venezuela and the United States. As a coaling station, and as a strategic center as well, it is an all-important key to the western hemisphere. All that has been said for the oft-mooted purchase of the Danish West Indies, only sixty miles away, applies with far greater force to the acquisition of Porto Rico, with its dozen good harbors and safe roadsteads, as compared to the one miniature port of St. Thomas. In fact, the whole coastline of the island is indented with harbors, bays, and creeks, where ships of the heaviest tonnage may come to anchor.

Most of these ports have the additional attraction of general healthfulness and abundant water-supply. Few countries of the extent of Porto Rico are so richly watered. Seventeen rivers and untold creeks and streams, taking their rise in the mountains, cross the valleys of the north coast and fall into the sea. Some of these are navigable for several miles from their mouth, at least for schooners and coasting vessels of moderate draught. Thus the rivers of Bayamo and Rio Piedras, which flow into the harbor of San Juan, the capital, are deep enough to allow small brigs to discharge their cargoes on their banks, while the rivers of Areibo, Manati, Loisa, and Trabajo are of such astonishing breadth and depth that it is difficult to realize how large bodies of water could gather in so short a course. This facility of water carriage is of great importance to the Porto Ricans, who can thus safely and cheaply export the produce of their fertile hills and valleys. In a country where it does not rain occasionally for six months at a time, moreover, such abundant water-supply is invaluable for purposes of irrigation and, for watering the stock.

It is expected that the Eastern squadron, intended for service in European waters, will be greatly enlarged and possibly a second commander in the person of Commodore Schley added to the fleet. No date is set for its departure, this depending upon the Porto Rican campaign. The European nations have shown themselves somewhat agitated by the report that the squadron's mission was to seize the Canaries and bombard the coast cities of Spain. The President has caused the powers to be informed that this is not its object. There was talk that Europe would have to adopt a sort of Monroe doctrine of its own against encroachments by the United States, but President McKinley has dispelled all that feeling, except, of course, among the inflammatory foreign newspapers. The President told the powers

that the purpose of sending Commodore Watson's squadron to Spain is to capture or destroy Admiral Camara's squadron and render Spain powerless to do any more mischief on the seas. To that programme no nation can take exception. After that is done, if Spain continues to defy us, and refuses to sue for peace, the powers will then have to consider their own responsibilities in the direction of compelling her to do so. The ships will come north and the big ones will go to New York to be docked. This will cause delay in departure. The Indiana has been damaged by the enemy's shells, and nearly all of the powerful ships have four bottoms. This work may hold back Watson's squadron until after Porto Rico is surrendered.

Whether the unfriendliness of the relations between the Cuban and American troops has been over-stated or not, it is true that there is considerable friction there. A letter of complaint was alleged to have been written by General Garcia to General Shafter, but since no official information has been received concerning it, it is believed by most people to have been a fabrication. Special Instructions have been sent to General Shafter urging that the greatest care be exercised in dealing with the Cubans so as to avoid wounding their susceptibilities, with a view to keeping them from embarrasing our operations in Cuba if they cannot be made a positive aid to us. The insurgents are doomed to disappointment after disappointment as our plans for the pacification and regeneration of Cuba unfold themselves. This will prove true, because it is clear only a few of the more intelligent insurgents grasp the American idea of government. The mass of the insurgents, it seems plain, expect that to them will be committed control of the affairs of Cuba, excluding the portion of the population which did not desire separation from Spain. A government of this sort would not be at all in conformity with American ideas, and could not consistently be tolerated by the United States. It is recognized here that to work out the problem of giving Cuba a stable government will be a matter of years, rather than months. The population of the island will have to be educated up to the idea. Meanwhile American control of the island must continue, however impatient the insurgent leaders may become for its end.

There appears to be a growing sentiment in Spain in favor of peace. The present cabinet hardly dares to conclude peace on even the most moderate terms, but it is evidently Senor Sagasta's intention to go as far as possible and then hand over the negotiations to a military or combination ministry, preparations for which are now well advanced. The queen is strongly in favor of peace and has used all the means in her power to bring it about. The position in which she is placed is a most trying one and her personal qualities have commanded the respect and admiration of even those who are opposed to her politically. Her anxieties as a queen mother are increased by the illness of the little king, for she believes the illness to be due to poison and guards him carefully. The Carlist party is said to be growing stronger, the weakest feature of it being Don Carlos himself.

Later despatches announce that Spain has already made a direct appeal for peace to President McKinley through the French ambassador. The proposition was general in terms and simply asked that negotiations be opened for the purpose of terminating the war and arriving at terms of peace. No reference was made to any of the Spanish possessions nor an armistice suggested. It is doubtful if an armistice would be granted, while the American forces were winning victory after victory and while there was as yet a vague idea as to what Spain intended to do.

Reports have also been received that General Miles has already made a landing on Porto Rico at Guanica, which was easily captured. The troops were landed and are expected to capture the railway connecting the town with Ponce, ten miles away. From here there is an excellent military road, eighty-five miles long, leading direct to San Juan. The landing at this port is a deviation from the original plans and will cause other changes to be made.

Arrangements have been completed by the government for the transportation of the Spanish prisoners at Santiago from Cuba to Spain. The contract was awarded to the Spanish Trans-Atlantic Company, represented by J. M. Ceballos & Co. of New York. The company agrees to carry the prisoners from Cuban ports to Spain at the rate of \$20 for each enlisted man and \$55 for each commanding officer, subsistence to be furnished by the company on the army ration basis as provided for in the government's advertisements for bids.

On the basis of 24,000 enlisted men and 1,000 officers, it will cost the government \$535,000 to transport the prisoners.

The ships will fly the colors of Spain and will be manned, probably entirely by Spanish crews. One of the curious developments of the war is that the United States government should enter into a friendly contract with a company many of whose vessels are auxiliaries to the Spanish navy and some of which have been captured or destroyed by the navy of the United States.

Hood's Pills
Should be in every family medicine chest and every traveler's grip. They are invaluable when the stomach is out of order; cure headache, biliousness, and all liver troubles. Mild and efficient. 25 cents.

The Klondike wonders have been lost sight of to a great degree since the more absorbing topic of the war has occupied so much space in the news of the day. Arrivals from that region, however, have revived the popular interest. Owing to the failure of the all-Canadian route, the approaches to the gold country are all in United States territory. The output of the mines of the Yukon region this year, while it has reached between \$10,000,000 and \$15,000,000, has disappointed even the more conservative estimates made last fall and based on the prospects then existing. Three things have contributed to this: the Canadian royalty, the lack of men and the lack of strengthening food. One of the most prominent civil engineers on the Pacific coast, who has spent the winter in the mines, has said: "Considering the fact that less than two thousand poorly fed men have got out this winter almost \$15,000,000, the Klondike has made a showing that entitles it to consideration as the greatest gravel deposit in existence and the richest in the world. The great riches of the bench claims on French, Chief, Little and Big Shookum gulches continue to be the wonder of the mining men in the interior of Alaska. These benches are old river beds which have been broken up by an eruption of the earth. A continuation of the old river bed has been found near Hunker Creek, and while but little prospecting has been done, it is thought it will turn out very well. Eldorado and Bonanza creeks have proved all that was expected of them. So many are the disadvantages of mining in the Northwest Territory that attention is being once more directed to mines on the American side, and all things considered, the American side would seem to be the place for the future.

Annual Field Meeting.

The thirteenth annual field meeting of the New Hampshire State Board of Agriculture in connection with the East Rockingham Pomona Grange will be held at Hampton Beach, N. H. Wednesday, August 10. The following excellent program will be carried out.

FORENOON SESSION, 10.30 O'CLOCK.
Opening address—Hon. John D. Lyman, Exeter, vice-president and presiding officer.

Address—"Medical Emergencies in the Farmer's Family," John D. Quackenbush, A. M., M. D., New York, Professor Columbian University.

Address—"The Scope and Purpose of the Grange," Hon. Aaron Jones, Indiana, Master National Grange.

Address—"The New Hampshire College of Agriculture and Mechanic Arts," Dr. Charles S. Murkland, president.

AFTERNOON SESSION, 1.30 O'CLOCK.
Address—His Excellency George A. Ramsdell, governor of New Hampshire.

Address—"A National View of Agriculture," Hon. J. H. Brigham, Washington, D. C., Assistant Secretary of Agriculture.

Address—"The Roads of Norway," Hon. S. C. Eastman, Concord.
The exercises will be held in a canvas pavilion on Boar's Head and all interested will be invited to attend. The meeting will be on the picnic plan.

World Over.

—The Maroons in Jamaica threaten war.

—Japan is shipping fancy goods to Australia.

—The ship Cromartyshire has been put in dry dock for repairs.

—There is a vigorous opposition to American bicycles in Germany.

—Emperor William's brother-in-law has been appointed regent of Brunswick.

—Over one thousand miles of railroad was subsidized by the last British Columbia Legislature.

—Owing to Russia's naval programme, England will build some new warships to cost \$75,000,000.

—Thousands of people are profitably employed in Germany in the manufacture of goods from straw.

Read and Run.

—The all-Canadian route to the Klondike is a failure.

—Banker Hepburn says the days of six per cent interest are past.

—Twenty-five persons are missing from the Frazer River salmon fleet.

—A Bridgeport man was found starving in the streets of New York.

—Pennsylvania's alien tax law has been declared to be unconstitutional.

—New York capitalists are to erect a large tin plate factory at Monaca.

—The Cleveland electric company has received a \$500,000 order from Paris.

—An epidemic of yellow fever is not likely to occur during the remainder of the summer.

—The Spaniards at San Juan are preparing to resist the attack of the United States forces.

—Senor Dupuy de Lome, formerly Spanish minister to the United States, says that the time is opportune for peace negotiations.

—The Cubans at Santiago have returned to their fields; Garcia proclaims that any of his soldiers may do the same.

—Ex-Queen Liliuokalani of Hawaii will seek to recover from the United States crown lands and a large sum of money.

—The New York cotton-goods men think no lasting benefit can come from such a curtailment as is proposed at Fall River.

—An examination of the wrecked Spanish ships shows wonderful results of our gunners' skill, and proves that the Maine was destroyed by external explosion.

OLD GLORY SHOW YOUR COLORS.

Trade with Porto Rico. It presents many interesting facts and has been widely noticed by the newspapers. In 1896, the island's foreign trade reached its high water mark, attaining a total of over \$36,000,000, most of which was with Spain; the next country in importance, however, being the United States. Coffee and sugar, the leading products of the island, are the important factors in her export trade; next in importance is leaf tobacco. In 1895, she exported 40,200,000 pounds of coffee and 132,140,000 pounds of sugar, and 3,660,000 pounds of leaf tobacco. The most interesting feature to Americans of Porto Rico's trade is the showing made under our reciprocity treaty with her from 1892 to 1894. During these three years the trade between this country and the island was considerably augmented, the average value of the period mentioned amounting to \$6,150,794, as against \$5,867,604 for the three years immediately preceding and only \$3,969,572 in the three years following the abrogation of the treaty by this country.

Washington News.

A bulletin of great interest at this time has just been issued by Mr. Frank Hitchcock, of the Department of Agriculture, entitled "Trade with Porto Rico." It presents many interesting facts and has been widely noticed by the newspapers. In 1896, the island's foreign trade reached its high water mark, attaining a total of over \$36,000,000, most of which was with Spain; the next country in importance, however, being the United States. Coffee and sugar, the leading products of the island, are the important factors in her export trade; next in importance is leaf tobacco. In 1895, she exported 40,200,000 pounds of coffee and 132,140,000 pounds of sugar, and 3,660,000 pounds of leaf tobacco. The most interesting feature to Americans of Porto Rico's trade is the showing made under our reciprocity treaty with her from 1892 to 1894. During these three years the trade between this country and the island was considerably augmented, the average value of the period mentioned amounting to \$6,150,794, as against \$5,867,604 for the three years immediately preceding and only \$3,969,572 in the three years following the abrogation of the treaty by this country.

CUBAN AND PORTO RICAN TRADE.

The Bureau of Statistics of the Treasury will next month publish a timely article on the import and export trade of both these islands, whose markets are about to be opened to the United States to an extent never before enjoyed. The figures which the Bureau will publish, shows, among other things, the manner in which the reciprocity treaty affected our trade with Cuba. The following table shows the total exports from the United States to Cuba during the past ten years. It will be noticed that during the three years of the operation of the reciprocity treaty, 1892, 1893 and 1894, the exports to the island were largely in excess of those of preceding years and that immediately following the abrogation of the treaty by this government, the exports fell markedly.

1888.....	\$10,053,560
1889.....	11,691,311
1890.....	13,084,415
1891.....	12,224,888
1892.....	17,953,570
1893.....	24,157,698
1894.....	20,126,321
1895.....	12,807,661
1896.....	7,630,880
1897.....	8,259,776

TOBACCO CULTURE.

The Agricultural Department has been making strenuous efforts to gather some data with reference to tobacco culture which will be of practical use to growers or those contemplating engaging in the industry. It has just now published a bulletin by Otto Carl Butterweck of Brooksville, Fla., which seems to be a thoroughly practical treatise, touching upon all stages of culture from selection of seed, burning and preparing the seed-bed, preparing the soil, planting out the crop, to its cultivation, topping, cutting for the crop and saving seed for another year. The fertilizer question is also discussed and the various insect pests which annoy the grower. Trouble with insects begins the moment the seed is sown and continues even after the tobacco is harvested and hung in the curing shed. Ants in the seed bed, cut-worms at the planting of the crop, and tobacco worms through the growing season have to be continually sought for and destroyed. The tobacco grower must be up betimes and must be constantly on the alert. The worms which destroy the leaf are found most easily in the early morning and most growers search for them at this time, this being the surest and most satisfactory method of destroying them. The field must be covered at least three times a week as the worms are voracious. A good deal of specific information is contained in the bulletin which will be worth while sending for by those interested in this crop.

HOUSE FLIES.

Most of us have supposed that the common house fly which appears in such numbers in the summer time and disappears with cold weather is a pest which comes from no one knows where and of which there is no means of getting rid, but Entomologist Howard of the Department, in a little pamphlet shows that the house fly breeds in filth and manure, and that if there were no horse manure there would be practically no flies. The fly is an extremely dirty sort of an individual and is shown to be capable of transmitting diseases. Mr. Howard claims that if all horse manure, instead of being exposed to the air and thrown out in piles, should be transferred to a covered box or sink, as soon as made, the propagation of flies would be largely prevented. A single stable in which a horse is kept will supply flies for an extended neighborhood. The flies lay their eggs in immense numbers in fresh manure, as many as 200 having been found in less than a cubic inch of manure taken from a spot two inches below the surface of the pile. As it only takes about a third of a day for the eggs to hatch maggots and about ten days for the perfect fly to emerge, and as each fly lays probably 120 eggs it will be seen at what rate flies can propagate under favorable conditions. The fly has its natural enemies, among which are the common house centipedes as well as various parasites, but the comparative number destroyed is so small as to make no appreciable difference in the general supply.

FOREIGN TRADE.

Two items of interest coming to the State Department is a statement from Consul-General Goldschmidt of Berlin to the effect that Germany's 1897 exports

of beet sugar were the largest in the history of the country, reaching the enormous total of 2,616,776,425 pounds; and a statement from Consul Harris, of Nagasaki, Japan, showing United States imports of flour and wheat into Japan during the past three years. The result is gratifying, indicating a great growth in Japan's demand for those articles. In 1895 we exported to Japan 484,000 pounds of wheat and 113,800,000 pounds of flour; in 1896, 2,451,689 pounds of wheat and 31,400,000 pounds of flour; in 1897, 12,400,000 pounds of wheat and 31,000,000 pounds of flour, and an interesting feature of the statement is that in 1897 the total importations of wheat into Japan amounted to only 21,300,000 pounds and of flour 31,220,000 pounds, showing that the United States has the bulk of her wheat trade and practically all her flour trade.

EXPERIMENT STATION WORK.

The government is constantly making experiments in agriculture. Its system is quite complete, the National Department of Agriculture being a sort of clearing house and keeping a general supervision and direction of the efforts being made by the various Experiment Stations of the different states, which, however, are operated singly and independently. The department assuming that each local station knows more than anybody else about the particular needs of its locality. The department is issuing as farmers' bulletins the result of experiment station work. These are published whenever sufficient matter is collected to make a bulletin of twenty-five or more pages, and are highly instructive, giving, as they do the result of actual field experiments, and saving in many cases, the necessity of the farmer going to unnecessary labor and expense in trying some method which others before him have tried and found unprofitable; or on the other hand demonstrating the practicability of adopting certain methods which would prove too costly for the ordinary farmer to attempt unless assured of their success. Experience is generally, of course the best teacher; but it may be the most costly teacher, so that with too much undirected experimenting, a man may find himself rich in experience and poor in everything else. Another thing, a man's own experience seldom extends beyond convincing himself and a few friends, as other people do not know to what extent his experimenting can be relied upon, but with government experimenting carried on by men recognized as eminent in their profession, and results deduced only after several years' trials, the conclusion is satisfactory, and when these results are published in popular manner and form, and distributed to all desiring them, as is the case with the Department bulletins, the good accruing to the farmers of the country may be very great.

GUY E. MITCHELL.

The appearance of the home place has been somewhat neglected during the rush of haying, but soon there will be enough time to fix up the lawn, flower garden and paths. Some farmers will do anything rather than attend to such work, but it is noticed that a majority of the best farmers take a pride in the outward appearance of their home.

—Further concession in the price of wheat expected.

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BOSTON, MASS.

WEIR MUSICAL FESTIVAL.
The ninth annual meeting and festival of the New Hampshire Music Teachers' Association will be held this summer at the Weirs, a delightful and well-known spot on the shores of Lake Winnepesaukee, August 1, 2, 3, 4, 5. The Weirs festival needs no advertising beyond a mere announcement of the event, for their success year after year is guaranteed enough that those to come will be worth the attention of musicians everywhere. The programme of the event, which has just been issued, shows that this year's festival will comprise a splendid series of instructive and entertaining lectures and concerts, and with a strong force of first-class musicians.

The order of exercises for the week will be as follows: Chorus rehearsals on Monday evening, Tuesday morning, afternoon and evening, and at other specified times through the week, and on Tuesday and Wednesday afternoons, concert and dancing on Wednesday evening; a recital of Scotch and English ballads by A. McKenzie Matlock, of Albany, on Thursday morning, and piano recital by Milo Benedict, of Concord, Thursday afternoon. At the grand concert on Thursday evening the chorus will sing "Daybreak," by Fanning, "Flight into Egypt," from Herlioz's "Childhood of Christ," and the finale from "Lorelei." Mendelssohn's unfinished opera, and many distinguished soloists will assist. On Friday morning, Dr. Carl E. Duft will lecture on the cultivation of singing; a piano recital by Mr. Alfred DeWitt, of Boston, will be given on Friday afternoon, and the grand closing concert will take place Friday evening, when the soloists and chorus, assisted by the orchestra, will give the principal parts of Donizetti's delightful opera "Linda de Lamourous." The soloists participating include many well-known artists, among them being Dr. Carl E. Duft, of New York; E. C. Towne, of New York; A. M. Matlock, of Albany; Miss S. Marian Craft, of Boston; Miss Frances Wellington, Peoria, Ill.; Mrs. Elizabeth Hawking, of Boston, and many others.

The chorus will be the finest in the festival's history, and will be under the leadership of Mr. H. G. Blaisdell, of Concord, who will conduct all the concerts of the festival, and the orchestra of fifteen pieces will render efficient aid. Reduced rates will be made at the Weirs hotels, and the Boston and Maine has made reduced rates from many stations, and full information may be had of ticket agents.

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GET THE BEST

If you want the best power in the world for your cream separator, milking machine, or wood saw, you do the most work of

OUR HOMES.

THE BRAVEST BATTLE.

The bravest battle that ever was fought,
Shall I tell you where and when?
On the map of the world you will find it not—
It was fought by the mothers of men.

Not with cannon or battle-boat,
Nor sword or mightier pen;
Not with wonderful word or thought
From the lips of eloquent men.

But deep in patient mother's heart,
A woman who could not yield,
But silently, cheerfully bore her part,
Aye, there is the battle.

No marching troop, no bivouac song,
No banners to dim the way;
But from the cradle to the grave,
From the lips of eloquent men.

OUR CHAPERON.

There were a dozen souls upon the canal-boat. Templeton was responsible for it, and he was equal to the burden; for if there was one thing Templeton was cut out for, it was to be host on such an occasion.

He was not the owner of the boat—naturally; a bachelor, fond of good living and of ease, has very little use for a boat; but he was the sole chaperon for the period of one week, during which time he and his seven guests, his cook, his coachman, his butler, and his man of all work—late captain of the Norah J.—cruised along the Erie Canal, and enjoyed life. He had chartered the boat from the captain for the purpose of taking his friends off for a novel outing, and they had unanimously accepted the invitation; and in order to add to the novelty of the occasion, Templeton had impressed his own coachman into the service of doing the driving.

The captain went along to help them over any difficulties as might arise, as well as to use language suited to their surroundings when language became necessary.

It was also to be the captain's duty to look after the boat, and to see that everything pertaining to the apartments therein was kept in ship-shape order.

At first Captain Jack was loath to charter his vessel; but he was influenced to change his mind by two considerations. The first was that his craft was a new one, and was as yet unpaid for, and the second was a check with Templeton's name signed to it, which would make the payment a matter of comparative ease. This, added to the fact that Templeton wanted him to go along and keep an eye upon his beloved craft, induced him to consent, although he demurred slightly when Templeton announced his intention of taking his driver along.

"What's the use of him?" asked Captain Jack. "He ain't had no experience drivin' canal-boats, has he?"

"No," said Templeton. "But he has driven my brougham about New York for two years running, and hasn't met with an accident yet. I guess a man who can manage a team on Broadway can get along on the Erie Canal."

"But I don't see," the captain began, "Well, you needn't see," said Templeton. "I don't ask you to see. I'm not going to have him whether you see or not. He's a good driver, and I have confidence in him. I'm not going to trust my life and the lives of my guests to the hands of an utterly unknown John."

"But what are you afraid of?" persisted the captain.

"What am I afraid of?" retorted Templeton. "Do you suppose I'm going to take the chances of being run away with on a canal-boat?"

The captain's laughter could have been heard a mile when Templeton said this.

"All right," he said; "let him go. I'll rig up a seat for him on the bow in regular tally-ho style."

The captain was as good as his word, and when they stepped aboard of the Norah J. there was a comfortable place for his seat, with the promised coachman's seat on the bow.

The saloon passengers upon this voyage consisted of Templeton, Barlow, Parker, and myself; of Miss Hawkins, of Pittsburgh; Miss Bronson, and Miss Remington of New York; and to chaperon the party, the demure little widow of our old friend Horace Tinsington.

Mrs. Tinsington was the ideal chaperon. In the first place she was not more than thirty years of age. She was pretty, and of a sweet, sunny disposition—though somewhat severe when her lot was cast in such places as she now found herself in.

She was never under any circumstances, disagreeable; but she gave every one to understand, by her superior manner, that she realized to the full the responsibilities which had devolved upon her; and she exacted from all that recognition of her authority without which her influence as a "lady superior" would have been absolutely nil.

In terms she never expressed disapproval of our acts, nor did she have much occasion so to do; but frequently we could tell from her demeanor that she would prefer that we comport ourselves with greater dignity, and our regard for her was such that nothing further was necessary. We reformed on the instant, though it must be confessed our reformation was usually merely temporary.

Caddy Barlow, more often than any of the rest of us, came beneath the ban of her displeasure, and that was because he was of the irrepressible order of mankind. He would sing comic songs on unlooked-for and inappropriate occasions, and he had also a penchant for unifying the little rowboat attached to the stern of the Norah J., and in company with Miss Hawkins, taking a run up the canal a mile or two ahead of the line of the serpentine stream, and his companion would buy up all the rock-candies, peanuts, and all the similar delicacies they could find.

Upon these occasions Mrs. Tinsington was always properly disturbed. Of course it was all right that Barlow and Miss Hawkins should go rowing upon the canal, and, personally, Mrs. Tinsington had no objection to their doing so; but that she should set her face against it, and she did so in her own very charming way.

Then, too, Parker and Miss Remington

ton found a great deal of time to be with each other. Many an evening, when the rest of us were in the bow, playing banjos and singing the latest popular song with more vim than attention to the score, or telling stories, or in some regrettable instances indulging in gossip, it would suddenly transpire that Parker and Miss Remington would turn up missing. Whereupon Mrs. Tinsington, full of her responsibility, would develop an uneasiness which soon communicated itself to the rest of us, and was generally not allayed until the truant pair were found sitting at the other end of the boat, and suspiciously far apart.

As for myself and Miss Bronson, I do not like to say very much, for Miss Bronson is now the wife of an Italian nobleman, and I am wedded to an American noble woman.

It must suffice for me to say, without entering upon any details whatever, that while we needed the kindly intervention of a chaperon, we sometimes detected in the lady's remarks upon social observances, or the lack of them, certain allusions which, under ordinary circumstances, we might have construed as personalities.

But it must be confessed that while we all felt the iron hand beneath the soft glove of our chaperon, the glove was so very soft and fitted so well that there was no resentment anywhere.

Furthermore, the young ladies were in a sense grateful to her. They had come upon the little inland voyage fully expecting to be called at an early hour in the morning.

They were going off on a cruise, and they naturally expected to find certain little pleasantly unpleasant duties to be performed, such as trimming the wicks of the cabin lamps, or dusting the chairs or removing an occasional flask of champagne from the piano top; but from the beginning to the end of the cruise nothing of this kind was exacted.

Breakfast was served at nine, and it always happened that when breakfast was over the young ladies discovered that nothing of a domestic nature needed to be done, for the very simple reason that Mrs. Tinsington had always attended to it before breakfast.

"But we can help you," protested Miss Bronson. "I am perfectly willing to get up at seven and dust the—er—the parlor."

To this Mrs. Tinsington with admirable self-possession replied: "It is not necessary, my dear. I am used to house-keeping, and you are not." And then remembering that she was a chaperon she added: "And besides, if you will sit up so late, you must get your sleep at the other end of the night. Don't bother."

And so they did not bother, although they solemnly vowed they would—and what was more, Mrs. Tinsington never retired until after they did, and consistently appeared two hours earlier in the morning. None of us noticed it at the time, but we did later on.

Templeton was very much the same. As I have said, he was a perfect host. If we wished to stay up until two in the morning Templeton was willing to stay up until three; but if it came to our doing anything in the early hours of the day, he would invariably say:

"Breakfast is rigidly fixed at nine. Don't get about until then. If there is anything to be done Mike or the captain will do it. Of course this isn't a first-class hotel, but it is a well equipped canal-boat, and my guests are not my crew."

So of course we never more thought of appearing before nine.

Well, it was a pleasant cruise, and at the end of the contemplated week we were all of us glad when Templeton extended it for another three days, and then we landed in New York.

Barlow parted humorously from Miss Hawkins, and ever after went his way in peace, and to my knowledge has not seen the lady since.

With Parker and Miss Remington it was different. They corresponded for a year, and by degrees they got to know each other to such an extent that it is difficult to-day for either of them to remember the other.

Miss Bronson and I said good-by at parting, and I must confess I went away with a lump in my throat, and she went away with my card and address. I presume that, inasmuch as I did not hear from her again until I saw her picture in a yellow journal as one of the American girls who had married abroad, she did not find me absorbing.

Mrs. Tinsington said good-by to us all with an affectionate fervor which at the time did not seem warranted by the known circumstances, and Templeton shook by the hand and hoped we'd "join him next year."

Now this seems a very commonplace sort of a story, and truly it is so. But it must be added that after it was all over, just forty-eight hours after, the engagement was announced of "Mr. James Templeton and Anita Horace Tinsington, widow of the late Horace Tinsington, Esq., of New York City."

Even this seems commonplace under the circumstances, until it is narrated that at a dinner recently given by my wife and myself to our former host and chaperon, Mrs. Templeton confided to the real head of my household—not myself—that her courtship was most romantic.

"Can you really believe it?" said she: "My husband actually proposed to me on a canal-boat, and before breakfast!"

After all it is not so stupid to be a chaperon—John Kendrick Bangs, in Independent.

"Have you ever noticed the change it makes in a woman's face
And her heart and her life, that were cold and dull
And slightly inclined to commonplace,
When Love shines on them? How there breaks
Over her nature a wave of gold,
Which reaches down to the very marrow,
Mellowing, widening more and more,
Lifting her up till her eyes behold
Ever new beauties for her hand to toil,
So she and her life grow beautiful?
Oh, there's never a woman, East or West,
But must live in Love's sunshine to live her best!"

"Write it on your heart that every day is the best day of the year. No man has learned anything rightly, until he knows that every day is doomsday."—Emerson.

NOT WHOLLY SERENE IN ARCADIA.

Uncle Nathan came down from the hills to make a call the other day, and while we sat in the gloaming, listening to the soft spatter of the lawn sprinklers, the laughter of the children in the street beyond and the whistling of the peanut-roaster, Uncle Nathan told us of some of the happenings up on the hills, and how it was not all serenely in our Arcadia.

The sun and wind of seventy summers and winters had tanned the wrinkled cheeks of Uncle Nathan, and his locks of dingy brown were fast turning gray, but his mild blue eyes were as bright as ever, and his gift of storytelling had not gone with the passing years.

I will tell you his story just as he told it to us, though perhaps some of the people whose affairs he was betraying will dislike this mild retelling, and will protest against such disclosures when next they meet Uncle Nathan, if they meet him:—

"Our town is havin' a dreadful time now, 'n' no mistake. A just dreadful time. 'N' I don't know it's all goin' to end. It's funny, too, how things do run along. Now, all winter there wa'n't enough goin' on to talk about, 'n' folk had to get along with the Hereafter 'n' Predestination 'n' them sort of things, 'n' now so much has happened that folks don't know which thing to settle first. I don't take much stock in the Hereafter (talkin' about it, I mean) or Predestination 'n' things of that kind. I'd rather have a good comfortable belief 'n' stick to it 'n' say nothin',—just believe an' not argue,—but you can't always have your druthers, ez Aunt Nancie used to say, 'n' sometimes you can't help yourself, 'n' somebody that's uneasy about the universe will make a fuss 'n' set you goin'."

But I was talkin' about something else. First the war came along, right on top of Mrs. Baxter's quillin'-bee, where they had so much rowdyin' that it made a lot of talk. We got along with the war fine, for most everybody believed that it was the dooty of the president to stop folks from carvin' other folks, whether they was Spaniards or what, though Cal Mason did say the whole thing was a scheme of Hannan's to get the next 'lection, 'n' nothin' but a big land grab. He says it will all come out some time, but I don't think the same way Cal does. Cal says that Hannan's wicked enough to bust up the Maine himself, but he can't prove to my satisfaction that Hannan did it. I don't know, I'm sure, what Cal's been dreamin'."

"'N' Aunt Bigelow says—but she was always a bit different from other folks—that the United States is so wide anyway, themselves, that they ain't got any business to try to make other nations do any different. She says our own city streets ain't safe, that footpads 'n' all sorts of evil folks is doin' just as bad things as the Spaniards do. Now I do want them goin' on down in Cuba stopped, but I'm perfectly willin' that things should be different up here, too, though I don't believe they are so bad as Aunt Bigelow makes out. I can get along with most everything as it is."

"Well, I've taken lots of time to tell all this about Seth 'n' the 'n' wide 'n' not even a dog let to run at his heels 'n' give him the love that only a dog is noble enough to give when men has betrayed the trusts of other men. That's punishment enough for any man, to hide his face in foreign lands, exiled by his own act from all companionship or knowledge of his kin, with his own guilty conscience to follow him as he goes."

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As things came out, one thing 'n' other, we kept hearin' how many folks had their money in that bank, 'n' it seemed as if everybody that had any money in town, had it in there. Folks we never thought of havin' any money had some there, 'n' folks we thought was real well off told how much they had there, 'n' it was always a good deal less than was thought. 'N', oh, the pity of it. Some found themselves with all the savin's of a lifetime gone at one blow, 'n' there was old folks with no one to care for 'em, 'n' widows 'n' orphans, 'n' cripples, 'n' well-to-do, all atin' 'n' sufferin' faces, waitin' for they knew not what. One had been plannin' to take out her money next quarter day, but hadn't. One was waitin' for interest day to pay her bills, and another mistrusted Waters, but thought he'd wait a while. One poor woman had ordered a tombstone for her boy who was dead, 'n' now is out workin' to pay for it. She was goin' to use that money. 'N' her mother had no money to pay for her husband's coffin, 'n' so she went 'n' then there was Polly Moore, poor old woman who supported herself takin' in washin' 'n' who went round gittin' 'n' chuckin', 'n' who had scrimped 'n' starved 'n' worked herself 'n' her fingers to the bone all her life, that Seth Waters might have champagne suppers at the hotel. I tell you men went round with pretty gray faces those days, 'n' it was a pretty hard test of their religion. We didn't hear much about 'ol' folks then."

Folks were a tellin' how Seth would come up in the spring fishin' 'n' give money all around to the places where he'd been, 'n' all the time it was Gramma Raymond's money, 'n' Widder Gray's money, 'n' the money of poor orphans that he was scatterin' right 'n' left. 'N' then he'd have big game suppers at the hotel, with wine 'n' cards, 'n' people said nothin'. It was Seth Waters, you know."

We don't know where Seth Waters is. There's some who hopes he'll be caught 'n' locked up, 'n' there's some who think hangin' none too good for him, 'n' meanwhile his house 'n' all his belongings, the rich furniture 'n' the fast horses, 'n' the wine in the cellar is bein' sold 'n' scattered right 'n' left; the old house where his father lived 'n' where his mother bore him, 'n' where she dandled him on her knee, 'n' where he dreamed of comin' days; the house where he brought home his bride 'n' where his child was born. But do you know, it seems to me as if there could not be any harder punishment than that of hidin' day by day in some far corner of this wide world, thinkin' of the ruin he has done, 'n' the thoughts in men's minds, 'n' knowin' that the things that made it home, was under the hammer, bein' scattered far 'n' wide, 'n' not even a dog let to run at his heels 'n' give him the love that only a dog is noble enough to give when men has betrayed the trusts of other men. That's punishment enough for any man, to hide his face in foreign lands, exiled by his own act from all companionship or knowledge of his kin, with his own guilty conscience to follow him as he goes."

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THE HORSE.

Hot Weather Horse Feed.

It is an excellent practice to give the work horse mixed feed at night, and a mixture of oats and corn for the morning and noonday meals. Our practice is to mix in the grain bin ten bushels of oats with five bushels of shelled corn. Four quarts of this mixture is given to each horse, mixed with one quart of bran. It is then slightly moistened, just enough to make the bran stick to the grain. A little hay is given in the morning, always sprinkling it with water. At night the horses are given mixed feed, which consists of shelled oats, cut up fine, half bushel mixed with half peck of heavy millfeed, and one quart of corn chop. This is the allowance to each horse or mule. A little salt is sprinkled over the mixture and just moistened with water. A medium sized forkful of hay is put in the manger of each. With such a daily ration, teams at severe labor can be kept in splendid condition and health. The mixing trough must be kept clean and sweet. Have the horse troughs cleaned out daily. Shred oats, where well cured, are sweet, soft and nutritious. The horses are very fond of it. The oats are cut up as wanted. We like this way of feeding them; there is no waste as every particle is eaten. To have a superior quality of oat hay the oats must be cut when the grain is in milk. Let the straw get a full day's sun, then put up into hand shocks, putting twenty sheaves into a shock. The shocks are covered with canvas caps and are left out in the field until thoroughly cured. We find that an acre of rich, mellow land will give us two large loads of this oat-hay, or in the neighborhood of two and one-half tons.—Baltimore American.

"Lockjaw."

It is astounding that the smallest wound of any kind on any part below the knee or hock, as well as in the fleshy parts of the body, will more frequently develop lockjaw than a large wound, but when the treatment these wounds receive is considered it reduces the astonishment considerably. Large wounds are mostly placed under the doctor's care from the first, and he uses antiseptics liberally before he brings the edges of the wound together by sutures and prescribes continuous antiseptic treatment throughout, whereas a small wound or prick with a nail is thought to be too insignificant for such treatment, and, unless lameness develops or the horse loses his appetite, has difficulty in swallowing or stands stiffly in his stall, no notice is taken of the matter. Such a method is wrong, and too often a valuable horse is lost in consequence. All little wounds should be attended to at the time; hot water and carbolic soap should be used to cleanse the wounds and the parts washed clean; then the part should be well saturated with a solution of bichloride of mercury, one grain to one thousand of water, then a piece of medicated cotton should be wetted with it, a light, thin bandage carefully applied, and, as a rule, this dressing is only needed every other day till the wound heals. At times lockjaw follows after surgical operations, such as docking and castration, but when this is found out it is generally too late for the disease has grasped its victim and will not let go.

Colds should at all times be closely watched after the operation, and as soon as the slightest change in countenance and eye is noticed the doctor should be summoned and he may by the anti-toxin treatment save the colt, but this is only successful when begun early; after the symptoms of lockjaw are manifest it is too late.

When a colt is operated on the parts should first be well washed clean as directed above, and the bichloride solution used liberally before operating; then when instruments are properly sterilized there should be but little fear of lockjaw, provided the colt is kept in a clean box stall till the wounds heal. It must be remembered that the bacillus of tetanus or lockjaw resides in the dark earth, to be found in gardens and paddocks around farm yards, and this little organism will get into fresh wounds and secrete a fluid which develops the disease; therefore, colts should never be allowed in these lots for exercise after the operation.

With care and the judicious use of one of the many antiseptics there should be very few cases of lockjaw, and when the instruments are carefully cleaned and sterilized there should be still less.

When a horse shows symptoms of the disease he should be put into a darkened loose box stall and kept absolutely quiet from the first, no one but his attendant allowed to go near him and a doctor should be summoned at once.—Baltimore Sun.

The Weather Bureau's Weekly Crop Bulletin.

FOR WEEK ENDING MONDAY JULY 25, 1898.

OFFICE OF THE UNITED STATES WEATHER BUREAU, BOSTON, MASS., JULY 26, 1898.

The weather of the week has been favorable to vegetable growth in all sections. Showers which fell in about all parts greatly improved crop conditions. Haying was, however, much delayed, and in some instances the grass materially injured; about three-fourths of the crop is harvested. The crop is very large. Rain is still much needed in New Hampshire and Vermont and parts of western Massachusetts. Early potatoes are already injured in many sections of these states. Unless rain comes soon corn and late potatoes will be a short crop. In the remaining states potatoes and corn are very promising. Apples will be light. The cranberry crop is in doubt. The bloom, which was full, in many bogs abundant, has been greatly injured by fire worms. The probability is that the crop will exceed that of last year. The Cranberry Growers' meeting has been postponed to await a certain knowledge of the damage by the fire worm. The condition of the tobacco crop is generally satisfactory. It is mentioned as being exceedingly uneven. Cutting will soon begin in some sections. The crops of the district taken as a whole are fully up to the average and the outlook is encouraging.

MAINE.

Androscoggin.—Timely and copious showers saved potatoes in many sections; vegetation growing fast. Aroostook.—Growing weather; showers have improved all crops, but poor for haying. Cumberland.—Copious showers have improved crops; potatoes and corn growing fast; corn ten days late. Hancock.—Rains helped crops, especially grain and potatoes; haying well over.

Kennebec.—Drought broken; crops promising; hay practically secured; corn silking. Lincoln.—Rain needed; potatoes and corn doing well. Hay three-fourths saved.

Oxford.—Drought broken; some potatoes injured by dry weather; apples light; haying mostly done.

Piscataquis.—Crops looking fairly well, but need rain; early potatoes sown; hay an average crop.

Sagadahoc.—Heavy showers; crops growing well; some hay damaged by rain; small fruit doing well.

Waldo.—Rain much needed; corn generally good; potatoes on high ground suffering; haying about done.

Washington.—Crops generally doing well, especially corn; apples will be a fine crop; rain is needed.

York.—Rain helped crops; haying well advanced.

NEW HAMPSHIRE.

Belknap.—Rain needed; corn, grain and potatoes look well; early potatoes small; apples and berries light.

Carroll.—Showers improved corn, potatoes and crops generally; apples scarce; haying mostly done.

Cheshire.—Rain needed; garden truck good and plentiful; considerable hay yet to cut.

Grafton.—Showers helped crops; grain good but late; apples light; very warm week.

Hillsboro.—Heavy showers very beneficial to crops; high winds damaged some corn.

Merrimack.—Showers improved crops; apples falling, the crop will not be large.

Rockingham.—Weather favors all crops; drought hurt potatoes; winter apples are a short crop.

Sullivan.—Vegetation suffering for rain; showers in some sections very beneficial; fruit poor.

VERMONT.

Addison.—Crops growing fast; early potatoes light; most oats and barely cut, fair yield; a warm week.

Bennington.—Light showers, but ground very dry.

Caledonia.—Showers very beneficial, more needed; small crop of apples; potatoes yielding well.

Chittenden.—Crops promising; apples a failure; pears plentiful in some sections; corn, potatoes good.

Grand Isle.—Early potatoes rusting, late ones good; oats good; corn promising; apples scarce; rain needed.

Lamoille.—Fine weather for crops; potatoes rusting in some fields; large crop of hay mostly secured.

Orleans.—Showers have improved crops; high winds have injured corn and lodged grass in places.

Rutland.—All crops need rain; corn backward; oats short; potatoes suffering.

Washington.—Showers have helped all crops, which are growing rapidly, more needed; corn backward.

Windham.—Showers have saved corn and potatoes in many sections; barley promising.

Windsor.—Showers improved corn and potatoes; barley ripening; haying being finished.

MASSACHUSETTS.

Barnstable.—Good weather; crops doing well; apples short; cranberries fairly promising for average crop.

Berkshire.—Good weather; corn and potato growing fast; good crop of rye harvested.

Bristol.—Crops look well; corn and potatoes a little backward.

Essex.—Growing weather; sweet corn nearly ready for market; haying mostly over; potatoes good.

Franklin.—Showers have improved corn and vegetables; weather favorable for growing crops.

Hampden.—Corn and potatoes growing fast; crops in good condition; apples not favorable.

Hampshire.—Rain needed; tobacco very uneven, condition good, cutting will soon begin in some sections.

Middlesex.—Fine weather; all crops doing well; potatoes good; corn late.

Plymouth.—Fine weather for vegetables and corn; cranberries bloomed heavily but much damage by worms.

Suffolk.—Excellent weather; vegetables and grass in good condition.

Worcester.—Early potatoes fair yield; crops in good condition; corn and onions promising; apples light.

RHODE ISLAND.

Bristol.—Showers have improved all crop conditions.

Kent.—Crops doing well; oats generally light; corn growing fast, ten days late; haying about done.

Newport.—Crops in good condition, growing fast; corn and potatoes promise average yield.

Providence.—Crops generally looking well; oats light; berries plentiful; fruit falling; apples most promising.

Washington.—Corn and potatoes look well; all growing crops improved.

CONNECTICUT.

Fairfield.—Crops improved; apples and early potatoes light; oats light; tobacco promising; growing fast.

Hartford.—Crops progressing well; showers delayed haying; tobacco doing well; apples good.

Litchfield.—Showers have improved crops, including fruit; oats, rye, fair crops; harvest well along.

New Haven.—Crops greatly improved; early potatoes light; corn growing rapidly; peaches average crop.

New London.—Vegetables looking well; corn backward; high winds have lodged grain some.

Tolland.—Crops growing finely; haying delayed by rains; rains have improved outlook.

Windham.—Crops looking well; corn tasseling; grain generally fair.

J. W. SMITH,

Section Director, Boston, Mass.

AGRICULTURAL FAIRS FOR 1898.

We shall be glad to receive information from secretaries relative to the dates of holding fairs not included in the following list.

MASSACHUSETTS.

Amesbury and Salisbury, Amesbury, Sept. 27, 28.

Brookline, Brookline, Sept. 27, 28.

Barnstable, Barnstable, Aug. 30, Sept. 1.

Berkshire, Pittsfield, Sept. 13, 15.

Blackstone Valley, Uxbridge, Sept. 27, 28.

Bristol, Taunton, Sept. 20, 22.

Deerfield Valley, Charlemont, Sept. 15, 16.

Essex, Penobscot, Sept. 20, 22.

Franklin, Greenfield, Sept. 20, 22.

Hampden East, Palmer, Sept. 20, 21.

Hampshire, Amherst, Sept. 15, 16.

Hampshire and Franklin, Northampton, Oct. 5, 6.

Highland, Middlefield, Sept. 7, 8.

Hingham, Hingham, Sept. 27, 28.

Hingham, Hingham, Sept. 27, 28.

Housatonic, Great Barrington, Sept. 20, 22.

Manufacturers' Agricultural, North Attleboro, Aug. 30, Sept. 1.

Marblehead, Marblehead, Sept. 20, 21.

Martha's Vineyard, W. Tisbury, Sept. 20, 21.

Middlesex North, Lowell, Sept. 15, 17.

Middlesex South, Lowell, Sept. 15, 17.

Nantucket, Nantucket, Aug. 31, Sept. 1.

Oxford, Oxford, Sept. 8, 9.

Plymouth, Bridgewater, Sept. 14, 16.

Spencer, Spencer, Sept. 22, 23.

Union, Blanford, Sept. 14, 16.

Weymouth, South Weymouth, Sept. 20, Oct. 1.

Worcester, Worcester, Sept. 7, 8.

Worcester East, Clinton, Sept. 15, 16.

Worcester Northwest, Athol, Sept. 15, 16.

Worcester South, Sturbridge, Sept. 15, 16.

Worcester West, Barre, Sept. 20, 21.

MAINE.

Androscoggin, Livermore Falls, Aug. 30, Sept. 1.

Aroostook, Houlton, Sept. 27, 29.

Androscoggin Valley, Canton, Sept. 27, 29.

Bridgton Farmers' Club, Bridgton, Sept. 6, 8.

Buxton and Hollis, Buxton, Sept. 20, 22.

Cumberland, Gorham, Sept. 20, 22.

Cumberland Park, Cumberland, Sept. 27, 28.

Central Washington, Machias, Sept. 20, 21.

Durham, Agricultural, Durham, Sept. 21, 22.

Eastern Maine Fair Association, Bangor, Aug. 29, Sept. 2.

Eden Agricultural, Salisbury Cove, Sept. 21, 22.

East Edgemoor Farmers' Club, East Edgemoor, Sept. 21, 22.

East Piscataquis, Milo, Sept. 22, 24.

East Somerset, Harland, Sept. 22, 24.

Franklin, Farmington, Sept. 20, 22.

Gray Park Association, Gray, Sept. 20, 22.

Hancock County Agricultural, Hancock, Aug. 30, Sept. 1.

Bluehill, Bluehill, Sept. 20, 22.

Hancock County Fair Association, Ellsworth, Sept. 13, 15.

Kennebec County, Randolph, Sept. 13, 15.

Lake View Park, East Sebago, Sept. 20, 21.

Lincoln County, Damascus, Sept. 27, 29.

Lee Union, Lee, Sept. 5, 9.

Maine State Pomological, Maine State Agr. Soc., Lewiston, Sept. 15, 16.

Northern Cumberland, South Harrison, Sept. 28, 29.

New Gloucester and Danville, Upper Gloucester, Sept. 13, 15.

Northern Hancock, Amherst, Sept. 13, 15.

Northern Knox, Union, Sept. 20, 22.

Northern Oxford, Auburn, Sept. 21, 22.

North Penobscot, North Penobscot, Sept. 21, 22.

New Portland Agricultural, N. Portland, Sept. 21, 22.

New Waldo, Unity, Sept. 21, 22.

North Washington, Princeton, Sept. 6, 8.

North Berwick Agricultural, North Berwick, Aug. 23, 25.

Oxford, Norway, Sept. 20, 22.

Orrington Agricultural, Orrington, Aug. 30, Sept. 1.

Pittston Agri. and Trotting Park Association, East Pittston, Sept. 13, 15.

Penobscot, Hampden, Sept. 13, 15.

Riverside Park Assoc., Bethel, Sept. 13, 15.

Richmond Farmers' Club, Richmond, Sept. 27, 29.

Ramshack Park, W. Newfield, Sept. 27, 29.

Southern Aroostook, Sherman Mills, Sept. 27, 29.

South Kennebec, South Windsor, Sept. 27, 29.

Sagadahoc, Topsham, Oct. 11, 13.

Somerset, Madison Bridge, Sept. 5, 6.

Somerset Central, Sept. 5, 6.

Shapleigh and Acton, Acton, Sept. 5, 6.

Springvale A. and M. Association, Springvale, Sept. 5, 6.

Sanford Trotting and Fair Association, Sanford, Sept. 5, 6.

West Oxford, Fryeburg, Sept. 27, 29.

West Penobscot, Exeter, Sept. 27, 29.

West Piscataquis, West Piscataquis, Sept. 13, 15.

Waldo County, Waldo, Sept. 13, 15.

Washington County, Pembroke, Sept. 14, 15.

West Washington, Cherryfield, Sept. 14, 15.

York County, Saco, Aug. 30, Sept. 2.

NEW HAMPSHIRE.

Bradford and Newbury, Bradford, Sept. 27, 29.

Rochester, Rochester, Sept. 13, 16.

VERMONT.

Champlain Valley, Burlington, Sept. 6, 9.

Rutland, Rutland, Sept. 13, 15.

Rye and Wells, South Rye, Sept. 21, 22.

Springfield, Springfield, Sept. 18, 19.

Valley Fair, Brattleboro, Sept. 25, 29.

Walla Walla Valley, East Cornwall, Sept. 21, 22.

Windsor, Woodstock, Sept. 25, 30.

Winooski Valley, Waterbury, Sept. 13, 15.

CONNECTICUT.

Gulford, Guilford, Sept. 28, 29.

New London, Norwich, Sept. 5, 7.

Newtown, Newtown, Sept. 27, 29.

Union, Enfield, Sept. 20, 22.

Union, Huntington, Sept. 21, 22.

Windsor, Windsor, Sept. 13, 15.

Berlin, Berlin, Sept. 21, 22.

Bradford, Bradford, Sept. 21, 22.

Chester, Chester, Sept. 28, 29.

Danbury, Danbury, Sept. 28, 29.

East Granby, East Granby, Oct. 4, 5.

Farmington Valley, Collinsville, Sept. 7, 8.

Granby, Granby, Sept. 4, 5.

Harwinton, Harwinton, Oct. 4, 5.

Killingworth, Killingworth, Sept. 13, 14.

Meriden, Meriden, Sept. 6, 8.

New Milford, New Milford, Sept. 27, 29.

Newtown, Newtown, Sept. 27, 29.

Rockville Fair Assoc., Rockville, Sept. 20, 22.

Simsbury, Simsbury, Oct. 4, 5.

Stafford Springs, Stafford Springs, Sept. 4, 5.

Springfield, Springfield, Sept. 21, 22.

Union (Monroe, etc.), Huntingdon, Sept. 21, 22.

Union (Somers, etc.), Enfield, Sept. 28, 29.

Wallingford, Wallingford, Sept. 20, 22.

Willingham Fair Association, Willingham, Sept. 27, 29.

Winsted, Winsted, Sept. 19, 21.

Woodstock, South Woodstock, Oct. 12, 13.

Wolcott, Wolcott, Oct. 12, 13.

NEW YORK.

Albany, Albany, Sept. 12, 13.

Albany, Albany, Sept. 12, 13.

Binghamton, Binghamton, Sept. 12, 13.

Binghamton, Binghamton, Sept. 12, 13.

Binghamton, B